Developing Outdoor Learning Areas: A Kentucky Guide

Why Use Outdoor Learning Areas?

There is little doubt that school boards, architects, contractors and teachers would find it ludicrous to build a beautiful new school and then close off half of it before students ever arrive. Not only would it be a waste of money, but also students and teachers would miss the many learning opportunities afforded by those lost facilities. Yet, this exact scenario is played out when a new or remodeled school does not take advantage of its outdoor learning features as learning tools for students. This guide helps school planners, school boards, teachers and parents better understand how outdoor learning sites can enhance learning opportunities for children.

Numerous learning goals in the Academic Expectations, Core Content for Assessment and the Program of Studies focus on the living and nonliving systems that support us and the creatures around us. Often the very best way to study these systems is to see them in action. For example, as any gardener will tell you, the best way to study how plants grow – is to watch them grow - literally making food, fiber, shade and shelter out of sunlight, seeds, water and soil. While the sun provides energy to make plants grow, it also provides energy (usually indirectly) to keep us warm and cool and performs many other functions that we need to live, thrive and learn. Plans for using these special learning areas are best made as a building or renovation is being planned. This makes use of the outdoor space more effective, easier to access for learning, and saves costs in the end.

The Essentials of Outdoor Learning Areas

Listed below are several features that are necessary to make optimal use of outdoor learning areas. Below that are lists of additional features that further enhance these areas.

- At least 5% of the school site should be devoted to the outdoor learning area. An ideal outdoor learning area is at least one half acre. For schools with no grounds at all, the surrounding neighborhood can be used as an outdoor learning area.

- The area devoted to outdoor learning should have topsoil (suitable for growing plants) at least five inches deep.

- A portion of the area devoted to outdoor learning should have direct sunlight at least six hours a day.

- The area devoted to outdoor learning should have access to a water source (e.g. hose, pond or cistern) that can be used for watering plants, cleaning tools, running experiments, etc. This source should be within fifty feet of the site. (Note: If using a natural water source, make sure it is tested regularly for safety.)

- The area devoted to outdoor learning should be in a safe location away from traffic, construction or other hazards. A quiet area is also helpful, where this is possible.

- The area devoted to outdoor learning should have a location (preferably shaded) where students can sit and write or work in groups.

Optional Features for Outdoor Learning Areas

In addition to these required features listed above, a number of other features can be added to the outdoor area that provide outstanding learning opportunities for students. Listed below are some of these features including directions for how to create them and suggestions for how that can be used to enhance learning.

- Wildlife Habitat
- Weather Station
- Birds/Bird Blinds
- Wetland
- Rocks and Geology
- Soils
- Historical
- Walking Trails
- Native Plant Gardens
- Greenhouses
- Space and Sky
- Butterfly Gardens
- Energy Use
- Solid Waste
- Indoor Air Quality
- Pest Management
- Building Design
- Water and Wastewater

Keeping Students Safe Outdoors

As with all learning areas, issues of safety are very important. Often those responsible for students avoid outdoor learning areas because they fear for the safety of children. However, outdoor areas, when designed properly and used appropriately, are no more hazardous than regular classrooms. Of course, common sense and ordinary precautions should be taken. (For example, not having students outdoors for long periods of time without sun protections) but otherwise, students are just as safe outdoors as in. In fact, several studies have shown that discipline problems and horseplay are reduced in outdoor settings because students are highly engaged in their own learning (Lieberman and Hoody, 1996).

Listed below are ideas for making outdoor learning areas as safe as possible.

- When designing the area, make sure that it is either away from traffic, construction and “attractive nuisances" or that students are protected from these things by fences or other barriers.

- If the area is in a natural state, make sure it is cleared of poison ivy and other hazardous plants, when at all possible.

- Provide a list of reasonable and prudent measures to teachers who wish to use the outdoor learning (such as being aware of sun exposure)

- Allow students to help plan for their own safety by making lists of possible hazards and how to avoid them.

- Make sure that students have assignments to complete in the outdoor learning area that will keep them focused and on task..

A Note on Energy & Archaeology

- We have not included a section on energy education in this guide because there is an entire national movement to create more energy efficient schools and schools in which the entire building is used as a laboratory for studying energy efficiency, as well as other conservation techniques. To learn more about ways your school can join in this effort, go to The Kentucky Energy Education Development Project website **http://www.need.org/states/kentucky/** and to the Rebuild America website on energy smart schools at http:www.rebuild.org/sectors/ess/index.asp. For even more information, contact the Kentucky Division of Energy at **http://www.energy.ky.gov/programs/education/**.

- Archaeology is a very complex endeavor and disturbing archaeological sites is against the law. Having said that, learning how humans have impacted the environment throughout history and prehistory is a very valuable area of study. Teachers wishing to involve students in archaeology can learn more about proper techniques from the Kentucky Director of Project Archaeology, Dr. Gwynn Henderson at **aghend@uky.edu**